

REMARKS

Claims 16-30 are pending in the application, with Claims 27-30 withdrawn from consideration. Claim 16 is amended to overcome a rejection under 35 USC 112, second paragraph, as discussed below. New Claims 31-32 are added. New Claim 31 is based on paragraph 0141 and is analogous to the method of using a positive photoresist. New Claim 32 is based on paragraphs 0142-0143 and is analogous to the method of using a negative photoresist. The term “solvent extraction or washing” is employed throughout the specification.

Claims 16-26 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claim 16, as amended, recites:

16. A method for fabricating a multiple electrode device comprising at least one pair of electrodes that form at least one junction and at least one connector species connecting said pair of electrodes in said junction, said junction having a functional dimension in nanometers or micrometers, wherein said at least one connector species comprises said bistable molecule provided with at least one photosensitive functional group for patterning said connector species, said method comprising:

- (a) forming a first set of said electrodes on a substrate;
- (b) depositing a film of said bistable molecule(s) including said at least one photosensitive group;
- (c) exposing portions of said bistable molecular film to desired radiation to thereby cause at least one of photochemical decomposition or photochemical transformation of said at least one photosensitive functional group; and
- (d) removing unwanted portions of said bistable molecular film to provide a photopatterned film.

In Claim 16, the Examiner considers step (b) to be indefinite and confusing as to the phrase “depositing a film of said bistable molecule(s) including said photosensitive group prior to said depositing”. The last phrase “prior to said depositing” is considered to be confusing in its relation to the initial depositing step.

Applicants have amended step (b) to delete the phrase “prior to said depositing”. Applicants have also amended step (b) to recite that the bistable molecules each include “said at least one” photosensitive group, as recited in the preamble of the claim. The bistable molecule includes the photosensitive group prior to step (a). The photosensitive group thus provides the bistable molecule with photosensitivity, which is exploited in steps (c) and (d) (exposing the

molecular film comprising the bistable, photosensitive molecules to radiation and then removing the unwanted portions of the molecular film to provide a photopatterned film).

Also in Claim 16, the Examiner considers step (d) to be indefinite wherein the step forms a “patterned molecule”. The Examiner contends that it is unclear if there is a single molecule in the photopatterned area or if the area is a photopatterned layer having many of the molecules connected.

Applicants have amended step (d) to replace “photopatterned molecule” with “photopatterned film”, which is the end result of Applicants’ method, namely, the formation of a photopatterned film, as is clear throughout the specification. The photopatterned film, of course, could comprise discrete bistable molecules in pre-determined areas after patterning.

With regard to the formation of a patterned film, Applicants note that either an approach analogous to the use of a positive photoresist or to the use of a negative photoresist may be employed. New Claims 31 and 32 are added to claim this feature of Applicants’ invention.

Finally, Applicants have amended step (c) to add the phrase “to thereby cause at least one of photochemical decomposition or photochemical transformation of said at least one photosensitive functional group” to be more explicit as to the effect of the irradiation step; see, e.g., paragraph 0072.

Reconsideration of the rejection of Claims 16-26, as amended, under 35 USC 112, second paragraph, is respectfully requested.

Applicants understand that upon an allowance of a generic claim, they will be entitled to consideration of claims to additional species that are written in dependent form or otherwise include all the limitations of an allowed generic claim (37 CFR 1.141). Claim 25 is generic to each of currently withdrawn Claims 27-30.

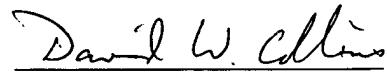
The Examiner cites Zhang et al (2002/0075557A1, 2002/0176276A1, 2002/0114557A1, 2004/0066677A1, and 2004/0227605A1) as having a common inventor and assigned to the same assignee, but lacking a photosensitive functional group as claimed herein. Applicants agree that the claims of the instant application are patentable over the cited references.

The application is considered to be in condition for allowance. The Examiner is respectfully requested to take such action. If the Examiner has any questions, he is invited to contact the undersigned at the below-listed telephone number. HOWEVER, PLEASE CONTINUE TO ADDRESS ALL FURTHER WRITTEN CORRESPONDENCE TO: IP ADMINISTRATION,

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Respectfully submitted,

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